The ATLANTA ECONOMIC REVIEW

MARCH 1959 VOL. IX. NO. 3

CONTENTS

THE LITHONIA STORY 3
by Michael H. Mescon

A COMMODITY-BALANCE INDEX OF INTERNAL ECONOMIC DEVELOPMENT 9
by Roy J. Sampson

MARKETING IMPLICATIONS OF INTERURBAN DEVELOPMENT 15
by Stephen Paranka

THE SOUTHEASTERN CORNER 20
by Warren A. Walker

ATLANTA BUSINESS ACTIVITY 22

GEORGIA STATE COLLEGE
OF BUSINESS ADMINISTRATION
BUREAU OF BUSINESS AND ECONOMIC RESEARCH

THE ATLANTA ECONOMIC REVIEW

GEORGIA STATE COLLEGE
of Business Administration
School of Business Administration
Bureau of Business and Economic Research

Noah N. Langdale, Jr., *President*
George E. Manners, *Dean*
Willys R. Knight, *Director*

RESEARCH COUNCIL

James E. Hibdon

Fritz A. McCameron

Jack Blicksilver

Stephen Paranka

William G. Scott

EDITORIAL STAFF

Director
Willys R. Knight

Editor and Statistician
William H. Wells

Research Associate
Mary H. Bowdoin

Secretary
Jane Saunders

THE ATLANTA ECONOMIC REVIEW is published monthly by the Bureau of Business and Economic Research as a service to business and academic communities. It will be sent free on request. Address requests, manuscripts, and other communications to **The Atlanta Economic Review**, School of Business Administration, Georgia State College of Business Administration, 33 Gilmer St., S.E., Atlanta 3, Georgia. Second-class mail privileges authorized at Atlanta, Georgia.

This Month's Authors

MICHAEL H. MESCON

Dr. Mescon, now associated with Rich's, Inc., was until recently Associate Professor of Management in the School of Business Administration of Georgia State College of Business Administration.

His article entitled "The Lithonia Story" results from his experience in consulting with and advising officials of the Lithonia Lighting Products Company in their desire to approach management-labor relations problems from a "human relations" standpoint. It includes a report of the results of an interviewing program aimed at discovering employee needs.

A second article by Dr. Mescon, to appear subsequently, will be a discussion of the need for industry-sponsored objective research in solving the many conflicting situations in business and industry, including a contrast of the "professional" vs. the "medicine man" approach.

WARREN A. WALKER

Some of the adverse economic effects on the small communities, resulting from out-migration of population, were discussed in last month's "Southeastern Corner." In this issue, Mr. Walker offers some suggestions to the smaller communities in their desire to counteract these effects by attracting new industry.

ROY J. SAMPSON

Dr. Sampson is Assistant Professor of Economics, School of Business Administration, Texas Technological College. He is the author of numerous articles, principally in the field of transportation.

Dr. Sampson's current article suggests a new (or supplementary) quantitative measure of regional economic interrelationships — specifically, those relating to the interchange of raw materials and manufactured goods between different geographical areas. Using this suggested measure, he presents the commodity-balance indices of the various regions of the United States.

STEPHEN PARANKA

Dr. Paranka is Associate Professor of Marketing, School of Business Administration of Georgia State College of Business Administration.

His article "Marketing Implications of Interurban Development" is condensed from his full research paper of the same title, published by the Bureau of Business and Economic Research.

Dr. Paranka points out the enormous shift of population to interurban regions, shifting the centers of consumer demand. Marketing procedures, then, must make corresponding adjustments.

Mass depth interviewing is a research tool used to obtain insights for the application of human relations in industry. This is the story of how one company tackled its problems through a program designed to bring about a closer relationship between employee needs and management's understanding of those needs.

An Example Of Human Relations Research In Industry

The Lithonia Story

by
Michael H. Mescon

This article pertains to the manner in which one organization has seen fit to cope with the myriad of individual and group problems and conflicts that appear to be an almost natural accompaniment of company growth and survival in a dynamic, industry-oriented society. No real attempt is made to analyze isolated problems as such. Rather, the basic pattern of analysis will center about the creation of a single organizational configuration within which are spawned and nurtured those human relations dilemmas which appear to be virtually universal in nature rather than indigenous to any particular company or industry. Operating from this frame of reference, it is apparent that the incidents cited and the situations described may be of real assistance to those who recognize in this article problems that are faced by organizations of all types. This discussion is primarily concerned with training and interviewing programs, company organization, and workers' needs.

The Initial Contact

In late fall, 1957, a series of meetings was arranged between the author and the personnel director of Lithonia Lighting Products Company. The basic purpose of these meetings was to ascertain what could be done to enhance the quality of the supervisory segment of management at Lithonia Lighting. It was finally determined that a pilot in-plant training program consisting of fifteen sessions be inaugurated. This program was to be conducted on company time with participants coming from what the company considered to be key positions in the organization. These key positions were basically related to the production function, although a few participants came from staff areas.

Program content ran the gamut from interpreting company policy to work-simplification. The following subject areas were discussed in this program:

1. The Worker as an Individual
2. The Importance of Production
3. The Role of the Supervisor
4. The Working Environment
5. Creative Thinking
6. The Supervisor as a Leader
7. Recognizing Individual Differences
8. Work Simplification
9. Training Techniques
10. Morale as a Production Factor
11. Controls Applied to Production
12. Developing the Subordinate
13. Effective Communication
14. Handling Grievances
15. Interpreting Company Policy

Every attempt was made to secure optimum participation from each member. The more formal lecture method of presentation was enriched through the utilization of role playing and cases in order to realize the greatest individual and group involvement.

Program Reactions

Although participant reaction to this in-plant training program was basically positive in nature, it was almost immediately apparent that there were some basic limitations in terms of criteria for program participation. First, many participants could not legitimately be classified as supervisors. They were, in many instances, persons who had in the past demonstrated a capacity for hard work, but were not formally expected to direct the activities of others. Second, the untenable situation existed in which some of those persons who were formally classified as supervisors were also active union members who were more concerned with union affairs than with the attainment of company goals and objectives. Third, because of the basic types of experience represented by such a group it was necessary to structure the program, after the first few sessions, along orientation and indoctrination lines rather than increasing supervisory dimensions. At this juncture, perhaps a brief description of the company's history might explain why these situations existed.

Lithonia Lighting: A Description with Emphasis upon Supervisory Management

In a period of just over eleven years, Lithonia Lighting Products Company has emerged as one of the largest manufacturers of fluorescent lighting fixtures in the United States. Quite naturally, such rapid growth in a highly competitive industry resulted in certain weak points in terms of organization structure. As is often the case in contemporary society, a lag existed between technical and mechanical advancements at Lithonia and the application of sound human relations. This statement, however, should not lead the reader to believe that management was insensitive to worker needs. What is implied is the fact that a new approach to organization and management was needed to keep pace with such dynamic company growth. With the addition of new workers and unique production processes, the role of the supervisor became more complicated and exacting. No longer was technical skill alone the basic requisite for inclusion within the supervisory ranks. It became more and more apparent that the supervisor had to be a skilled human relations practitioner capable of providing the operative employee with a full and complete understanding of his, i.e., the operative employee's, work role and relationships within the company. Unfortunately, many of the supervisors, perhaps because they were uncertain about their own particular work roles, were just barely distinguishable from those supervised in terms of functions performed. More exactly, instead of performing the basic functions of management, many of those at the supervisory level perceived their function as being one of simply working along with the other workers, instead of coordinating and directing their efforts toward the attainment of company goals and objectives.[1]

In terms of total organization structure, the salient aspects of Lithonia Lighting are illustrated in the accompanying chart, which was prepared by the personnel director and the assistant to the general manager. Of course, the chart represents simply one aspect of organization, i.e., formal organization. The nature of structure of informal organization at Lithonia Lighting will be discussed in another section.

Lithonia's Interviewing Program

The mammoth business corporation of today often provides little opportunity for individual need satisfaction. The size of these structures when coupled with the application of our galloping technology has all but emasculated the formal work role of the operative employee. Caught in the web of bureaucracy, the average worker often has little opportunity to attain from his sterile work role the status, recognition, and security traditionally associated with work. Because of this bureaucratic blocking of worker needs, the informal organization and the union are often turned to as effective vehicles for enhancing both the individual's bargaining position and his feeling of importance.

---

1. Top management at Lithonia Lighting was well aware of this problem and certainly recognized that some positive action had to be taken in order to improve the quality of supervision through careful selection, training, and placement procedures.

It can hardly be questioned that the ideal situation in the business organization would be one in which no informal organization existed, assuming that the informal organization arises because worker needs cannot be satisfied within the framework of formal organization. In other words, it is quite possible that employer misunderstanding of employee needs might very well result in the employee's turning to the informal organization or the union for that type of satisfaction which management is unable to provide. It follows, then, that the goals of the formal and informal organization might very well be diametrically opposed—with the result that segmentation, departmental cleavages, and employee unrest become a normal part of the work environment.

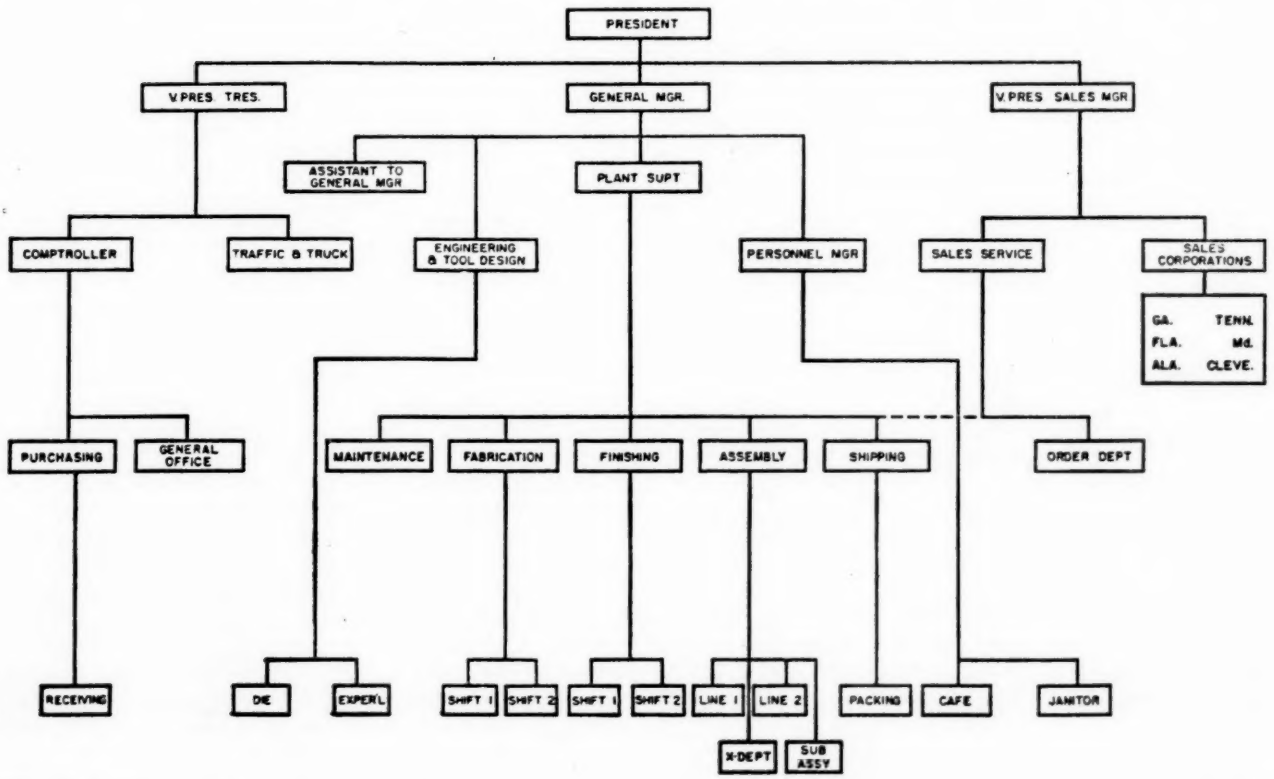
Operating from the above hypothesis, the management of Lithonia Lighting became interested in a mass depth-interviewing program structured about the relationship between employee needs and management's understanding of the needs. The role of the author, then, was to structure and conduct interviews with employees from all levels of the organization structure. Included in these interviews were questions pertaining to the employee's understanding of his work role along with ample opportunity to comment, both favorably and unfavorably, about the company, work environment, management, co-workers, etc. The interviewees were told that all of this information would be confidential to the extent that no names would be used by the interviewer in apprising management of the results of this program. The interviews were conducted in the company conference room which is away from any external disturbances. Every attempt was made to keep the interviews as relaxed and unstructured as possible, providing the interviewee with as much opportunity as possible to talk in an unrestricted manner.

The Operative Employee

What is it that the "average" employee wants from work? Common sense tells us that money is the important thing and that, in effect, money and motivation are virtually synonymous. As far as

ORGANIZATION

LITHONIA LIGHTING PRODUCTS



Lithonia Lighting is concerned, this hypothesis appears to be completely out of touch with reality. Of the 114 operative employees who were interviewed, only 11, less than 10 per cent, placed financial compensation in the number one position. Far more important, in terms of frequency, were such factors as:

1. Job security
2. Recognition by co-workers
3. Interesting work
4. Fringe benefits
5. Opportunity for advancement

Wages, in terms of total frequency, did not appear in the top five. Neither job security nor opportunity for advancement should necessarily be thought of as indicative of the worker's desire for higher wages. Job security in some instances appeared to be related to the employee's understanding of what was going on in the company rather than any type of guaranteed annual employment.

Of special interest is the fact that recognition by co-workers was of basic concern to the interviewees, more important even than recognition by management. This might very well be indicative of the existence of a rather strong informal organization whose growth could be nurtured by management's misinterpretation of the true nature of worker needs.

The Office Worker

The office worker, who traditionally is more management-oriented than the factory, or "blue collar," worker, placed job security in the number five position and company teamwork in the number one. In all, twenty office workers were interviewed. In the opinion of this segment of the work force, the following factors were of major concern:

1. Company teamwork
2. Interesting work
3. Recognition by co-workers
4. Opportunity for advancement
5. Job security

For office workers, also, the economic aspects of work appear to be relegated to an inferior position. The phenomenon may, in part, be the result of a preponderance of woman office workers who often view work as a transitional period between school and marriage or simply as a means of supplementing the earnings of the family's chief breadwinner. However, even if the above statement were completely valid, it would not explain why wage appears to be of relatively little significance, in terms of frequency, to the male factory workers who were interviewed.

Management's Views

The interview pattern used in connection with members of management was somewhat different from the pattern utilized with office and factory workers. Office and factory workers were asked to rank factors according to their own needs. The thirty management interviewees were asked to rank factors according to the way they thought these factors would be ranked by the people they supervised. Here, financial compensation is ranked one. The complete ranking is as follows:

1. Financial compensation
2. Opportunity for advancement
3. Job security
4. Working conditions
5. Recognition by management

Perhaps one of the basic causes of friction between management and the worker is the gap between worker needs and management's interpretation of these needs. Such a misunderstanding of the nature of what makes the average worker "tick" would quite naturally increase the social distance between these two groups, thereby strengthening feelings of ethnocentrism within each group, with the end result that empathy and understanding are replaced by suspicion and conflict. In this regard, notice that management makes no mention of the importance of recognition by co-workers, while the workers, both factory and office, are much concerned with peer recognition. Working conditions, while ranked number four by management, do not even appear as a factor of importance in terms of factory and office worker needs.

The critical significance of this attitudinal hiatus is well illustrated by the following statement:

> Supervisors who have a great deal of influence within their organizations are usually regarded very favorably by their workers. That's what two University of Michigan researchers found in a study of supervision in a large electronics firm.
>
> Their explanation for the findings: Supervisors who are influential and who understand what workers need may be in a better position to do something about these needs than those who don't pull much weight in the organization.[2]

It appears quite possible that the popularity of certain supervisors might very well be the result of concerted attempts to find out what it is that their workers desire in terms of job satisfaction.

---

2. The Foreman's Letter, November 17, 1958, published by the National Foreman's Institute, 635 Madison Avenue, New York, N. Y.

Understanding of Work Role

One of the major catastrophes that appear to accompany mass production seems to be a lack of pride in work accomplished. With the atomization of labor, the work role of the operative has been debauched in the name of technology. People no longer perform whole jobs, but rather segments or atoms of jobs. Certainly, in this type of work environment, which is perhaps inevitable in a society like ours, it is quite difficult to apply the psychologist Allport's concept of the functional autonomy of motives which describes that situation in which a thing that was formerly a means to an end might eventually become an end in itself. Certainly, if work were to become an end in itself, much of the ambivalence in terms of employees' feelings to work in general and their work roles in particular would be replaced by a more positive attitude toward the whole work process.

The lack of real identification with the formal work role was apparent in the employees' rather nebulous notions of what their jobs entailed. Many were not quite certain what they were supposed to do. Some were insecure about their formal work relationships in the organization. Many of those who occupied supervisory positions were almost notorious in their omission of the human element from their work roles. This is especially paradoxical since the process of management is generally conceived of as a process of goal attainment through the efforts of others.

Employee Comments: A Cross-Section

The overwhelming proportion of worker comments, both positive and negative, were structured about the human element, e.g., getting along with others, the quality of supervision, fair treatment, etc. Only a fraction of the total number of comments pertained to working conditions, work load, work hours, or other areas in this "physical working environment" category that management often stresses as being the most important aspect of employer-employee relationships. The following comments should indicate the general tenor of employee attitudes toward the total work environment.

One supervisor who was favorably impressed with top management at Lithonia commented that there was a general lack of teamwork in the organization. Another supervisor remarked: "From my way of thinking . . . it's the best place I ever worked." This same individual also commented that "most everybody is interested in his wage." The interviewee making this comment indicated that this was not necessarily the way he felt, but he was relatively certain that this was the general feeling of those he supervised. One office worker who felt that top management was very considerate also stated, "One person will tell you something to do, and then another person will tell you something to do." Another office worker voiced the same complaint when she complained about the general lack of organization in work routines. Still another member of the office staff remarked that there is a "lack of job security," and that it is "not fair to keep us hanging on a limb." In terms of employee attitudes toward the mass-interviewing program, one male office worker said "the interview helps me to feel that the company wants to know how I feel." One factory worker who felt that Lithonia Lighting offered him good opportunities for growth and development felt that relations between the company and the union could be better. Another factory worker stated, "The supervisor tries to be good but doesn't want you to take the responsibility." In reference to his relationships with his supervisor, one man commented, "The boss is good to you, ain't always hollering at you." Another employee felt that there are "too many men telling us what to do." A tool and die maker indicated that he felt that good teamwork existed in the organization. One high school graduate who was not completely certain what his job was felt that duties and responsibilities should be fixed. One welder who liked the friendly work atmosphere indicated that the supervisors could do a better job of handling employee mistakes. A woman, who liked her job otherwise, remarked that her supervisor "shows partiality between girls." Another woman, who worked in the same department as the above-quoted interviewee, commented. "I really don't enjoy my work." She also remarked that too much partiality was shown by her supervisor. One painter felt that the foremen should be friendlier and more understanding. One supervisor who particularly liked her work felt that there was a lack of teamwork within the organization.

In providing a general over-all summary of employee comments, the following observations appear valid:

1. **The majority of employees feel that Lithonia Lighting has a bright future and that it is a good place to work.**
2. **Much employee criticism centered about what was considered to be poor supervision at the lowest level of the supervisory hierarchy.**
3. **There were relatively few complaints about physical working conditions.**

Comments on Employee Comments

An analysis of the results of the mass-interviewing program seems to indicate a need for a thorough reappraisal of some of management's pet stereotypes. These stereotypes are certainly not indigenous to Lithonia, but appear to be native to many

business organizations. Unfortunately, many companies are not as interested as is Lithonia Lighting in the problem of how to create a truly positive work climate; and as a partial consequence of this apathy, many stereotypes tend to be nurtured and perpetuated. For example, management, in many instances, thinks of employee satisfaction in terms of high wages and good working conditions. Certainly the significance of wages is recognized as being a vehicle for the satisfaction of certain basic human needs. Good physical working conditions are also helpful, but not necessarily essential in the creation of a positive working climate. This opinion is fairly commonly recognized by those who have been performing research in the area of worker motivation. Yet, management, in many instances, does not appear to want to be confused by the facts. Facts, it seems, tend to disturb the status quo, which, in turn, would probably lead to necessary revisions in attitudes and behavior, but more especially in behavior. One thing appears evident. The quality of employer-employee relationships is contingent upon management's understanding of the personality of the various segments of its work force. Generalizations, spurious principles of management, and judgments based on an "I know what the workers want" framework lead to chaos and conflict.

by
Roy J. Sampson

The colonial-type trade pattern

A measurement of economic interrelationships between areas

Suggestions for nonindustrial areas

A Commodity-Balance Index of Internal Economic Development

The Northwest Ordinance of 1787, establishing procedures under which new states may be admitted into the Union in full equality with the old, rightly may be regarded as a landmark in the history of American political development. Politically, new territories were no longer faced with the prospect of indefinite subordination to the rule of the "mother" country. The chains of economic interrelationships, however, appear to be forged of stronger stuff.

Economically speaking, a "colonial-type" relationship exists when one geographic area primarily imports raw materials from other areas, manufactures or proceses these raw materials, and supplies the raw materials-producing areas with manufactured products. Historically, as is well known, this relationship has existed between the northeastern portion of the United States (a raw materials-importing, manufactured goods-exporting area) and most of the remainder of the country. The purpose of this article is to describe a usable quantitative measure of the degree of this internal economic interrelationship, and, by using this measure, to show this interrelationship as it presently exists, and as it has varied between several regions since the immediate pre-World War II period. This measure of economic interrelationship is not suggested as an "either-or" substitute for other measures dealing with the same subject, of course, but instead is presented as a supplement to existing concepts.

"INDUSTRIAL" AND "NONINDUSTRIAL" AREAS

Almost all raw materials moving in interregional commerce lose weight when manufactured or processed into finished goods. Also, manufacturing centers depend upon raw materials-producing areas for a considerable portion of their food supplies. It follows, therefore, that manufacturing regions will tend to import a larger tonnage volume of commodities than they export, and that raw materials-producing regions will export more tonnage than they import. A comparison of the freight tonnage originating with the tonnage terminating within a region, then, should indicate whether or not the region is an "industrial" or a "nonindustrial" region—if terminations exceed originations, the region is primarily an industrial one, while if originations are greater than terminations the region may be classified as nonindustrial.[1]

Further, a comparison of the relationships between freight originations and terminations over time should indicate whether or not a region is becoming more or less industrialized in comparison with other regions. And comparisons of the origination-termination relationships of different regions at a given time should show, in an approximate way at least, the relative degrees of industrialization existing in these regions at that time.

A COMMODITY-BALANCE INDEX

If total commodity originations and terminations for a region during some time period are known, a "commodity-balance index," or ratio, may be calculated by dividing regional terminations by regional originations. If the resulting figure is greater than one, by the definition give above, the region is an industrial region; if the index is less than one, the region is nonindustrial. Over time, if the commodity-balance index of a nonindustrial region

1. This terminology, of course, refers only to commodity-balance relationships, and is not to be interpreted as indicating balance of payments relationships.

moves upward toward one, the region is becoming more industrialized as compared to other regions; if the index moves downward away from one, the region is becoming comparatively less industrialized. Conversely, if the index of an industrial region moves upward away from one, it is increasing its relative industrial power; if the index moves downward toward one, industrial power is being lost in the relative sense.[2]

Exact figures covering all interregional movements of freight tonnage in this country are not available in any published form. Statistics covering private carriage, and to a considerable extent those of contract and exempt carriage, are incomplete, or at best are only estimates.[3] Reasonably reliable figures for railroad carriage exist, however, and, as long-distance traffic logically adjusts itself to existing conditions of population, resources, and industry, it appears unlikely that the over-all interregional pattern of other traffic differs significantly from this rail pattern.[4] Thus, an analysis of published regional rail freight organizations and terminations should cast considerable light upon internal comparative economic developmental relationships.[5]

A considerable portion of rail terminations in some coastal areas frequently may be destined ultimately for foreign export shipment rather than for manufacture or consumption in the domestic terminating region. Such foreign-destined shipments need not be regarded differently from other terminations for purposes of computing a commodity-balance index, however. The physical services connected with transshipment are analogous to the services connected with manufacture (both may add monetary value to the product and generate monetary income in the terminating region).

Extent of Railroad Freight Traffic

Railroad freight traffic (in ton-miles) as a per cent of total freight traffic has decreased during recent years. From 61.3 per cent of the total in 1940, the rail share advanced to 71.3 per cent in 1943, then steadily declined to 49.4 per cent in 1955.[6] During this period, however, the increase in total freight traffic was large enough that railroad traffic increased substantially in an absolute sense (1955 rail ton-mileage being about two-thirds greater than that of 1940). It is clear that, although they have shared in the increased volume of traffic, the rails have not obtained as much of this new business as have other forms of carriage. To some extent, then, particularly if new industries have located in a region during the period under study and have relied upon carriers other than rail for their interregional transport, comparative commodity-balance indices based exclusively upon rail traffic may be somewhat distorted. Also, to the extent that traffic which was diverted from railroads during the period studied, particularly that diverted to trucks, may have been composed more of manufactured goods than of raw materials, distortion results. But as water and pipeline transport is limited to relatively few commodities as well as by the location of waterways and oilfields, and as truck transport in the main is confined to short-haul rather than to long-haul movements, it is not likely that the resulting distortion of the interregional traffic flow picture is serious enough to cause undue concern. At any rate, a measure with some potential for error may be more useful than no measure at all.[7]

TABLE 1

Ratio of Railroad Freight Tonnage Terminations To Originations, Various Regions, Selected Years

Region	1940	1947	1955
New England[a]	2.404	2.202	2.155
Central East Coastal[b]	2.230	2.184	1.862
Southeast Atlantic[c]	1.304	1.276	1.223
Central East Mountain[d]	.432	.482	.578
Central Lakes[e]	1.459	1.182	1.214
Southeast Interior[f]	.568	.571	.635
North Plains-West Lakes[g]	.753	.751	1.029
South Plains-Gulf[h]	.900	.942	.930
Rocky Mountain[i]	.775	.692	.679
Pacific Northwest[j]	.841	.871	.785
Pacific Southwest[k]	1.042	1.108	1.028

a Conn., Maine, Mass., N. H., R. I., Ver.
b Del., D. C., Md., N. J., N. Y., Vir.
c Fla., Ga., N. C., S. C.
d Penn., W. Vir.
e Ill., Ind., Mich., Ohio
f Ala., Ken., Miss., Tenn.
g Iowa, Kan., Minn., Mo., Nebr., N. Dak., S. Dak., Wisc.
h Ark., La., Okla., Tex.
i Colo., Mont., N. Mex., Utah, Wyo.
j Ida., Ore., Wash.
k Ariz., Calif., Nev.

Source: Computed by the author from data published in the Interstate Commerce Commission's **Tons of Revenue Freight Originated and Tons Terminated in Carloads by Classes of Commodities and by Geographic Areas—Class I Steam Railways, 1940 and 1947, and Carload Waybill Statistics: 1955. State-to-State Distribution of All Commodities Traffic and Revenue.**

2. This analysis does not take into account the possibility that a nonindustrial area may be able to pay for a considerable import surplus by providing services (financial, tourist, gambling, etc.) or by liquidating its earlier real capital investments. Although this may be of some significance for small areas at particular times, however, it probably is of little quantitative over-all importance in the present-day internal United States picture.

3. A private carrier hauls his own goods. Common carriers "hold themselves out" to serve the general public, while contract carriers haul only for customers with whom they have a specific contract.

Important "exemptions," that is, traffic not subject to Interstate Commerce rate regulation, include agricultural commodities (broadly defined) carried by truck, bulk liquid cargoes carried in tank vessels by water transport, and movements of not more than three commodities carried in bulk by water contract carriers. There are several other less important exemptions. Probably not much more than one-third of intercity truck transportation, and one-tenth of inland water transportation, is subject to Interstate Commerce Commission regulation. Virtually all rail transport is regulated.

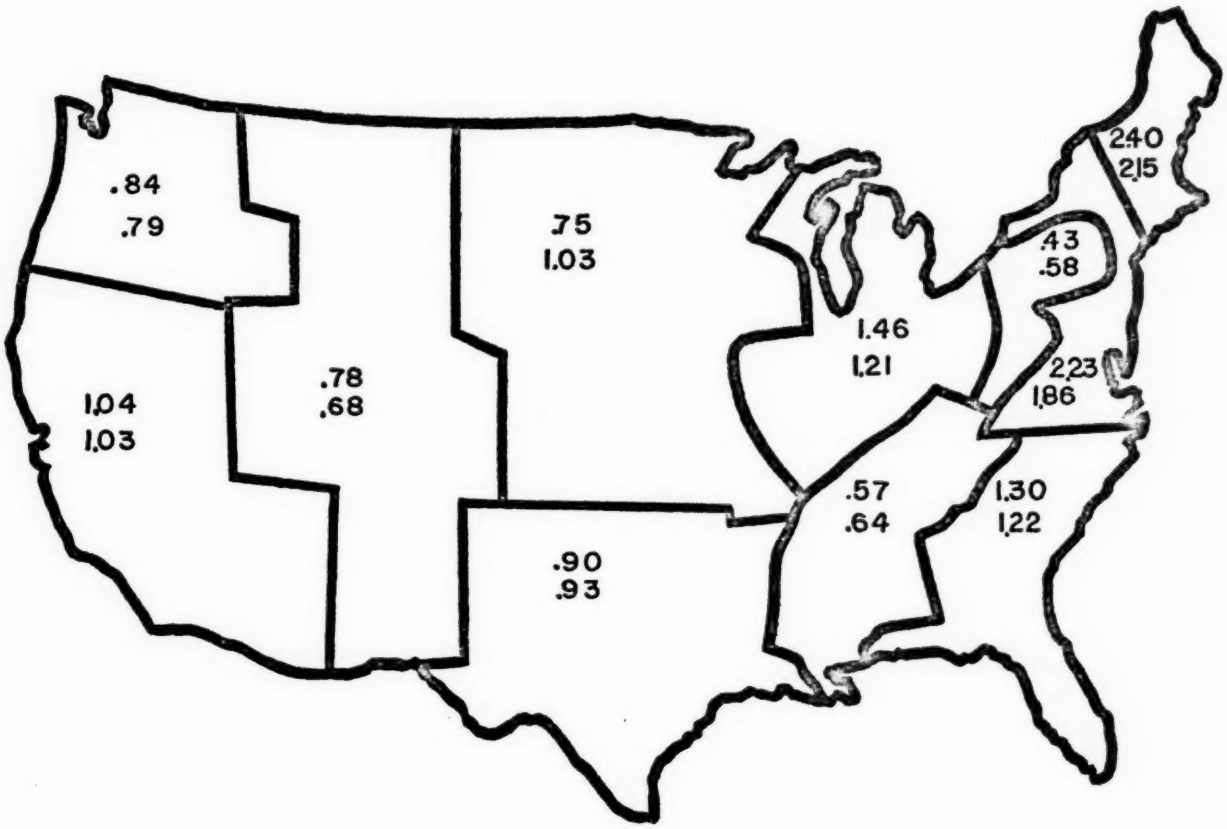
4. Cf. Stuart Daggett, **Principles of Inland Transportation**, 4th edition (New York: Harper and Brothers, 1955), p. 152, and Edward L. Ullman, **American Commodity Flow** (Seattle: University of Washington Press, 1957), p. 2.

5. The deficiencies of Interstate Commerce Commission waybill sample statistics, used herein below, are known to and frequently discussed among students of transportation, but in the author's judgment the possible errors contained in these data are of little significance for an analysis of the type discussed in this article. Those desiring information concerning the waybill sample, and its possible errors, are advised to see Interstate Commerce Commission, Bureau of Transport Economics and Statistics Statement No. 543, "Waybill Statistics, Their History and Uses," February 1954.

6. Various **Annual Reports** of the Interstate Commerce Commission.

7. There are indications that more statistical data concerning interstate movements of commodities by truck soon may be published by the Interstate Commerce Commission. Such data, if added to present rail statistics, might increase the reliability of the commodity-balance index as a measuring device.

Figure 1
COMMODITY-BALANCE INDEX, VARIOUS U. S. REGIONS
1940 and 1955*



*Top figures represent the 1940 and bottom figures the 1955 index.
Source: See Table 1 for explanation of regions and source.

Regional Indices

Table 1 and Figure 1 give for selected years commodity-balance indices based on the method suggested above. In computing the indices shown in Table 1, the years 1940, 1947, and 1955 were selected for comparison. The year 1940 was the last complete pre-World War II year. In order to avoid the traffic pattern prevailing during the adjustment from war to peace, 1947 was chosen over 1946 as a post-war year, while 1955 was the last year for which complete rail traffic figures were available at the time these computations were made. The author is not rash enough to affirm that any given year does or does not show a "typical" traffic flow pattern. It should be pointed out, though, that during each of those selected years the traffic effects of "hot" wars probably were at a minimum for the period, and that during each of these years the general level of economic activity was relatively high and rising.[8]

The eleven regions shown in Table 1 were chosen on the basis of geographical, economic, and transportation similarities and relationships, with considerable attention to existing Interstate Commerce Commission territorial divisions. Any construction of economic regions can be criticized on grounds of arbitrariness, and this is particularly true of regions made up of separate political divisions. In

8. Interstate Commerce Commission figures show that total intercity freight ton-mileage, in billions, was 619 in 1940, 1,019 in 1947, and 1,278 in 1955. Railroads carried 61.3 per cent, 65.2 per cent, and 49.4 per cent, respectively, of these annual totals.

the last analysis, though, regional boundaries are drawn by analysts to show whatever the analysts are trying to show. The author, therefore, while recognizing that different regional groupings would give different indices from those shown herein, feels that no further defense for this particular grouping is necessary.

Table 1 shows that (as of 1955) the three regions of the Atlantic Coast (New England, Central East Coastal, and Southeast Atlantic) all are industrial regions, as are the Central Lakes, North Plains-West Lakes, and Pacific Southwest regions. The Central East Mountain, Southeast Interior, South Plains-Gulf, Rocky Mountain, and Pacific Northwest regions are nonindustrial areas. New England is the outstanding industrial area, followed by the Central East Coastal region; while the Central East Mountain, the Southeast Interior, and the Rocky Mountain regions, in order, are the least industrialized.[9]

Shifts in Regional Economies

Several interesting index shifts during the period under study are shown by Table 1. All of the five 1940 industrial regions show a decreased index by 1955. The most significant relative decreases have occurred in the Central Lakes, Central East Coastal, and New England regions, in that order, with relatively minor decreases in the Southeast Atlantic and Pacific Southwest regions.

Industrialization of the Rocky Mountain and Pacific Northwest regions comparatively was less in 1955 than in 1940, while industrialization of the Central East Mountain region had increased substantially; industrialization of the Southeast Interior and the South Plains-Gulf regions increased to a lesser extent during the same period. The North Plains-West Lakes region's index showed little change from 1940 to 1947, but from 1947 to 1955 this region transformed itself from a nonindustrial to an industrial area—the only such change occurring during the period under study.[10]

The commodity-balance index of a nonindustrial region may be increased either by a decline in its export raw materials industries without a corresponding curtailment of its imports from other regions, or by a more rapid expansion of its manufacturing industry than has occurred in other regions, or by some combination of these two developments. Or the index of a nonindustrial region may be further lowered, even though the region's relative rate of manufacturing growth may be increasing, providing relative regional raw-materials production is increasing even faster. Likewise, the index of an industrial region could be decreased by the development of local sources of raw materials supply or by the failure to expand its manufacturing industry as rapidly as manufacturing is expanded in other regions.

As the level of economic activity in the main was high from 1940 to 1955, and as few notable developments in the expansion of raw materials supplies occurred in the industrial regions, it is likely that most of the index shifts shown in Table 1 were due to different relative rates of regional manufacturing growth. Possibly, also, the substitution of other fuels for coal has played an important part in increasing the index of the Central East Mountain region; and a relatively large expansion in raw materials production may have contributed to the decreasing index of the three westernmost regions and the Southeast Atlantic region.[11] In other words, manufacturing industry apparently has increased more rapidly in the nonindustrial areas as a whole since 1940 than in the industrial areas, with the most significant increase occurring in the North Plains-West Lakes region.

The foregoing analysis indicates that the traditional commodity-flow relationship between the northeast and other areas of the country still exists, but that the import-surplus areas also include the Southeast Atlantic states and the Pacific Southwest, plus scattered states even in the nonindustrial areas (and do not include all the northeastern states). Further, the locational pattern appears to be working toward a more even regional distribution of manufacturing industry, with most of the "have not" areas gaining at the expense of the manufacturing "haves." This equalization process is proceeding slowly, however, and at varying rates of speed, and perhaps with some exceptions to the trend.

In particular, it should be noted that the regions where the commodity-balance index has increased most rapidly during the period under consideration all are adjacent to the "old" industrial regions. It appears that the mid-twentieth century "industrial frontier," in the main, is advancing westward from the fringes of already industrialized areas, just as the nineteenth century "agricultural frontier" moved westward from the fringes of already-established agricultural areas. Whether or not this industrial migration will jump over a substantial portion of the western plains and mountain territory to the Pacific coast and start flowing backward into the intervening areas, thus creating a two-front movement, as did the nineteenth century agricultural frontier, remains to be seen.

In the three western regions furtherest removed from the "industrial heartland," including one in-

9 Not all states within a region always follow the regional pattern, of course. For example, in 1955, Colorado, Tennessee, Texas, and Washington, all in nonindustrial regions, had terminations in excess of originations.

10. Although it cannot be demonstrated conclusively from the statistics discussed herein, it appears likely that the greatest changes in this region occurred near the western edge of the Great Lakes and in the Upper Mississippi Valley.

11. This hypothesis has been tested for one region, the Pacific Northwest, and found to be true. See the author's "Rail Movements of Forest, Farm, and Factory Products To And From the Pacific Northwest," **University of Washington Business Review**, October 1958.

dustrial region as well as two nonindustrial regions, it appears either that manufacturing growth has not kept up with the rate of manufacturing growth in those industrial regions nearest the traditional industrial regions, or that the production of raw materials in the western regions has increased relatively more rapidly than in the eastern nonindustrial regions. Further preliminary study of the composition of directional traffic flows by the author (see footnote 11) tends to support the latter hypothesis. The two westernmost nonindustrial regions, in other words, appear to be falling substantially behind the more easterly nonindustrial regions in the relative relationship between manufacturing and raw-materials production due to a relatively greater western increase in raw materials output.

Finally, it is clear that, despite the relatively more rapid rate of growth of manufacturing industry in several of the nonindustrial areas as compared to the older manufacturing centers, these newcomers have a long ways to go before overcoming the manufacturing dominance of the old-timers.

Numerous groups are now working in the field of regional industrial development. The efforts of such groups might be made more productive by more complete information concerning the present relative industrial status and past trends of their regions. The use and further refinement of the commodity-balance index described herein may aid in developing such information, and, in addition, may provide a useful cross check on presently available information.

The Index as an Aid in Planning Industrial Development

Further research into the regional pattern of commodity balances, and especially into the factors causing relative shifts in these balances, should provide useful new policy guides for regional development agencies and similar groups. For example, our present railroad freight rate structure, which is based far more on "value-of-service" than on "cost-of-service" concepts, tends to encourage the long-distance movement of raw materials into manufacturing centers and of manufactured goods into raw materials-producing areas. The internal economic effect of a freight rate is similar to that of a tariff on international commodity movements. Raw materials-producing areas are handicapped in building up their industrial structure by tariffs (or freight rates) which make it possible for already established manufacturing areas to siphon off their raw materials and to transport manufactured products to their markets cheaply. Regardless of the over-all national implications of "free trade" versus "protectionism," it appears apparent that the protectionist route is preferable for an under-industrialized region attempting to industrialize in the face of competition from an already highly industrialized area. In other words, our existing freight rate structure tends to preserve the industrial status quo.[12]

Since the existing freight rate structure apparently does hamper industrial growth in raw materials-producing regions, especially in those most distant from the highly industrialized areas, groups interested in industrial development in these nonindustrial regions might profitably support policies designed to alter the rate structure in favor of their regional goals. Likewise, regions attempting to maintain their relative industrial position might be advised to support present freight rate structures which are compatible with their own regional objectives. Or, if geographical and resource factors, population distribution patterns, or other conditions indicate that significant shifts in the balance between regional raw materials production and manufacturing activity are not feasible for a particular region, efforts designed to change this balance should be opposed as being unnecessarily inefficient and wasteful of resources.

In conclusion, regional planners, in addition to knowing where they want to go, need to know where they are and in what direction they presently are moving, as well as whether or not they are moving in the direction most desirable economically for their region. Once these things are known, intelligent policy can be formulated. Further study of commodity flows and interregional commodity balances should contribute to such knowledge.

12. The author describes four possible "stages" of regional industrial development and discusses the type of freight rate structure economically appropriate for each stage in "Freight Rates a Factor in Regional Development," **Oregon Business Review** (Eugene: Bureau of Business Research, School of Business Administration, University of Oregon), December 1956.

American families spend close to one seventh of their budgets for household equipment and operation, which is more than is spent for rent but less than for food, . . .

* * *

FARM PROGRAMS NEED NEW LOOK TO AVOID WASTE

Neither the farmer, the taxpayer nor the consumer will fully benefit from the vast sums going into agricultural aid until United States government farm programs are more carefully devised to fit the needs for specific commodities—even for specific regions—rather than for whole groups of commodities, and until more long-range planning is done.

These are among the central conclusions of "The Agricultural Commodity Programs: Two Decades of Experience," a new Twentieth Century Fund study by Murray R. Benedict and Oscar C. Stine. If there is one broad generalization that can safely be made about the numerous and diverse commodity programs undertaken by the federal government during the past two decades, says the study, it is that no one type of program can be applied to all commodities or even to any very large group of them. Each major commodity, and many of the minor ones, has so many peculiarities of its own that any program designed to improve its position needs to be carefully and specifically worked out to fit the existing conditions.

* * *

Wood is one of the world's most versatile raw materials. It is still the chief building material and it supplies at least two thirds of mankind with fuel for heating and cooking, . . . As much as 90 per cent of all paper is made of wood. More than two thirds of the world's railways have wooden crossties.

* * *

In the last quarter century the number of chemical products marketed in the United States increased by 6,500-7,000 items, or an average of 270 products a year, . . .

* * *

Quoted from **Newsbriefs—A Clipsheet,** *Winter* 1958, *Number* 31, *issued by The Twentieth Century Fund.*

Of population increases in metropolitan areas, the major growth continues to be in the out-of-city sections. Marketing functions must be altered to meet the needs of these newly formed centers of population.

Marketing Implications of Interurban Development

by
Stephen Paranka

Demographic analyses indicate a definite trend toward the development of contiguous metropolitan areas into interurban regions. Both population growth and population decentralization are influencing this trend. The factor of greater mobility makes travel between these metropolitan areas relatively easy, reflecting a need to revise the market concept of separate metropolitan areas to include a regional characteristic. As in the past, marketing activities will have to adjust to a changing environment in order to perform most effectively, as explained in the following:

> The growth of super-cities is the most significant trend of the decade. People make markets and when people change, markets change. Your markets are changing now. You would be well advised to include the word "Interurbia" in your future planning. It is a development that cannot be ignored![1]

Pertinent questions which must be considered in the transition are: (1) What is the background of this population trend? (2) What is the future outlook of this trend? (3) What are the specific marketing implications?

Background

Population of the United States has been increasing rapidly over the years, influencing first the growth of large cities, and then a growth of populated areas near to but beyond city limits. To account for population in cities and near to cities, the Bureau of the Census has established the standard metropolitan area which is defined as a county or group of contiguous counties which contain at least one city of 50,000 inhabitants or more. The increased concentration of residents in standard metropolitan areas is shown in Table 1.

TABLE 1
Population Increase in the United States And 168 Standard Metropolitan Areas of the United States in the Period 1940-1950

	Population Increase (in millions)	Per Cent of U. S. Increase
United States	19.0	100.0
168 Standard Metropolitan Areas	15.2	80.0
Central City	6.0	31.6
Out-of-City	9.2	48.4

Source: Department of Commerce, Bureau of the Census, Census of Population, 1953, p. 28.

Of the total increase in population in the period 1940-1950, 80 per cent took place in the 168 standard metropolitan areas. Further analysis reveals that a larger proportion of the metropolitan increase occurred in out-of-city parts, 48.4 per cent compared to 31.6 per cent in the city areas. This population trend in specific areas is shown in Table 2. All of the areas shown experienced an increase in population; but, without exception, the proportion of increase in the out-of-city parts was significantly larger.

In the period 1950-1955, as shown in Table 3,

1. "Interurbia's Causing a Stir," Sales Management, LXXVIII (May 17, 1957), 83.

TABLE 2

Per Cent of Population Growth in Selected Standard Metropolitan Areas in the Period of 1940-1950

	Standard Metropolitan Area	Portions of Standard Metropolitan Area	
		City	Out-of-City
New York	10.7	5.9	23.2
Chicago	13.9	6.6	31.2
Philadelphia	14.7	7.3	26.1
Los Angeles	49.8	31.0	69.8
Detroit	26.9	13.9	54.8
Baltimore	23.5	10.5	72.9
Cleveland	15.6	4.2	41.6
St. Louis	17.4	5.0	33.8
Washington	51.3	21.0	117.1
Boston	8.8	4.0	11.5
Atlanta	29.7	9.6	57.8

Source: Department of Commerce, Bureau of the Census, **Census of Population, 1953, p. 1-69.**

the population increase in the 168 standard metropolitan areas was at an even greater rate (83.9 per cent) than the rate of increase (80 per cent) in the preceding ten year period. Furthermore, a much larger proportion of the increase was in the out-of-city parts, 70 per cent in the period 1950-1955 compared to 48.4 per cent in the period 1940-1950.

TABLE 3

Population Increase in the United States and 168 Standard Metropolitan Areas of the United States in the Period 1950-1955.

	Population Increase (in millions)	Per Cent of U. S. Increase
United States	13.7	100.0
168 Standard Metropolitan Areas	11.5	83.9
Central City	1.9	13.9
Out-of-City	9.6	70.0

Source: H. G. Brunsman and H. S. Shryork, "How Population Movement Creates Markets for Goods and Services," **The Commercial and Financial Chronicle,** January 19, 1956, p. 291.

Future Outlook

The rate of population growth in out-of-city metropolitan areas is expected to continue at a higher level than that in central cities. It has been estimated that by 1960 half of the standard metropolitan area population will be located beyond city limits.[2] Thereafter the trend is expected to swell the majority of inhabitants in the outlying metropolitan areas. Table 4 shows a projection of the estimated 1975 population of specific metropolitan areas divided into central city and out-of-city parts; in only the Chicago metropolitan area is the city population expected to exceed the out-of-city residents in 1975.

As the suburban fringe around central cities becomes densely settled, the population is expected to shift to rural parts of the standard metropolitan areas, largely unincorporated open country. One demographer predicts that 32 million (60.4 per cent) of the expected increase of 53 million in outlying metropolitan areas by 1975 will locate in the rural parts.[3] The evolution of these rural areas into communities is the pattern of growth leading to interurban development.

In the northeastern part of the United States the population growth and the decentralization to areas beyond city limits have developed into a stretch of connected metropolitan areas over 600 miles in length. This solidly populated stretch reaches from Maine to Virginia, and only two short distances—one of two miles and the other of seventeen miles—are not part of metropolitan areas.[4] Containing less than two per cent of the country's land area, Interurbia includes over one-fifth of the population and almost one-fourth of the retail sales.[5]

Future potential regional interurban formations include the following:

1. The steel belt joining Pittsburgh, Youngstown, Canton, Akron, and Cleveland.
2. Stretch including Lansing, Pontiac, Flint, Detroit, and Toledo.
3. Lake Michigan shore strip of Milwaukee, Racine, Kenosha, Waukegan, Chicago, Hammond, Gary, and South Bend.
4. Stretch consisting of Duluth, Minneapolis, and St. Paul.
5. Pudget Sound strip of Seattle, Tacoma, Portland, and Salem.
6. Strip including San Francisco, Oakland, Sacramento, and Fresno.
7. Stretch made of Los Angeles, Riverside, Long Beach, and San Diego.
8. Strip consisting of Dallas, Fort Worth, Waco, Austin, and San Antonio.
9. Florida coastal strip of St. Petersburg, Tampa, Sarasota, and Fort Myers.
10. Stretch comprising Atlanta, Birmingham, Chattanooga, and Knoxville.[6]

By 1975 it is estimated that interurban areas will represent 60 per cent of the country's population and 70 per cent of retail sales.[7] Such is the environment in which marketing operations will take place. The present challenge is to recognize the approaching changes and then to plan necessary adjustments in anticipation of need.

Marketing Implications

Interurban development has fundamental marketing implications. A primary objective in marketing is to make available the right product, in the right quantity, at the right time, at the right place, and at the right price. How effectively this marketing objective is being achieved can be determined by comparing marketing operations with consumer needs. As consumers change in personal attributes and physical location in interurban development, there will be strong influences upon marketing operations to change also. Changes will be required

2. Phillip M. Hauser, "Some U. S. Population Trends and Prospects," **Sears World,** I (Winter 1958), p. 21.

3. **Ibid.,** p. 20.
4. John M. Willem, "Interurbia Is Here to Stay." **Business Horizons,** I (Spring 1958), p. 26.
5. **Ibid.**
6. Willem, **op. cit.,** p. 27.
7. **Interurbia** (New York: J. Walter Thompson Company, 1958), p. 14.

TABLE 4

Projection of the Estimated 1975 Population of Selected Standard Metropolitan Areas In The United States

	Estimated Population 1955 (in thousands)	Estimated Population 1975 (in thousands)	Per Cent Increase
New York Area	13,763	17,418	27
New York City	8,000	8,625	8
Out-of-City	5,763	8,793	53
Chicago Area	5,988	8,024	34
Chicago	3,789	4,165	10
Out-of-City	2,199	3,859	75
Philadelphia Area	4,085	5,945	46
Philadelphia	2,161	2,630	22
Out-of-City	1,924	3,315	72
Los Angeles Area	5,346	10,919	104
Los Angeles	2,250	3,340	48
Out-of-City	3,096	7,579	145
Detroit Area	3,515	4,741	35
Detroit	1,902	1,980	4
Out-of-City	1,613	2,761	71
San Francisco Area	2,644	5,336	102
San Francisco	1,202	1,421	18
Out-of-City	1,442	3,915	171
Boston Area	2,490	2,914	17
Boston	814	814	0
Out-of-City	1,676	2,100	25
Pittsburg Area	2,379	3,078	29
Pittsburgh	677	677	0
Out-of-City	1,702	2,401	41
St. Louis Area	1,837	2,536	38
St. Louis	868	905	4
Out-of-City	969	1,631	68
Cleveland Area	1,629	2,379	46
Cleveland	908	900	—1
Out-of-City	721	1,479	105

Source: "Rush to Suburbs Just Starting," U. S. News & World Report, March 2, 1956, p. 38.

particularly in the functions of retailing, advertising, and marketing research as presented in the following sections.

Retailing

In retailing it is axiomatic that operations shift with population movement. The development of planned shopping centers in fringe areas of cities gives evidence to the retailing adjustment that has paralleled recent population shifts. As of mid-1956 there were about 2,000 shopping centers of all varieties in operation, and another 2,000 in the construction or planning stage.[8] An insight into the shift of retail sales is shown by results of a study of 48 principal cities, revealing that retail sales in the central business district in the period 1948-1954 increased 1.6 per cent, while total standard metropolitan area retail sales increased 32.3 per cent during the same period.[9] The retail sales of areas away from the central business district obviously realized a much greater rate of increase than did the downtown area.

Retail sales of different types of stores were affected differently by population decentralization, as shown by Table 5. Of ten kinds of retail businesses, three in the central business district showed absolute declines of approximately three per cent each. These retail stores were general merchandise stores (category includes department and variety stores), apparel and accessories stores, and drug stores. The importance of these sales volume reductions is evidenced by the fact that the three types of stores involved accounted for three-fifths of all downtown retail store sales in 1948.[10] In the per cent change in total metropolitan area retail sales, however, all kinds of business experienced an increase in the six year period, as shown by Table 5. Any decline in specific types of retail stores in the central districts naturally had to be offset by increases in those types of retail stores located in the outlying metropolitan areas.

The trend toward interurban markets should cause retailing activities to overlap standard metropolitan areas. As communities evolve alongside one another, a shopping center can assume the role of a centralized retailing institution, serving the outlying locations of several immediate metropolitan areas instead of only one. The concept of an individual standard metropolitan area market would then be unrealistic. Instead, it would be more meaningful to consider retailing interrelated with two or more metropolitan areas.

TABLE 5

Per Cent Change of Retail Store Sales in Central Business Districts and Standard Metropolitan Areas by Kind of Business, 1948-1954.

	Per Cent Change, 1948-1954 In CBDs	In SMAs
Food stores	0	39.7
Eating, drinking places	6.5	23.5
General merchandise stores	—2.7	9.8
Apparel, accessories stores	—3.2	13.0
Furniture, home furnishings, appliances dealers	13.3	35.3
Automotive dealers	20.5	54.1
Gasoline service stations	24.3	78.6
Lumber, building materials, hardware dealers	6.7	35.7
Drug, proprietary stores	—2.8	30.6
Other retail stores	4.4	20.5
Total retail stores	1.6	32.3

Source: Murray D. Dessel, Central Business Districts and Their Metropolitan Areas (Washington: U. S. Department of Commerce, 1957), p. 7.

Innovation of interurban areas would effect competition between downtown retailing areas. This competition would be influenced by consumer proximity to more than one downtown center. Movement of the labor force in the northeastern interurban development, for example, is a series of cross movements between metropolitan areas. A specific illustration is as follows:

> Most people commuting from Westport move southwesterly to New York, but a significant percentage commute to Bridgeport and New Haven. And Westport itself also receives part of its own labor force from lower Connecticut, nearby New York, and the surrounding countryside.[11]

8. William Applebaum and David Carson, "Supermarkets Pace the Future," Harvard Business Review, XXXV (March-April 1957), p. 128.

9. Murray D. Dessel, Central Business Districts and Their Metropolitan Areas (Washington: U. S. Department of Commerce, 1957), p. 7.

10. Ibid., p. 6.

11. Interurbia, op. cit., p. 10.

The situation of consumers in an interurban region with a choice of more than one downtown center would require the retailers in the central business district to regard this additional aspect of competition. By the same token, the trading area for the downtown retailers is enlarged to extend beyond the bounds of a single metropolitan area and into parts of surrounding metropolitan areas. Interurban development, thus, would require retail operations to adjust to a new way of thinking concerning competition and market potential.

An incidental adjustment which retailing would have in the interurban environment is the procedure for transportation and storage. The warehousing function in a broader market would probably require additional storage locations to serve the more distant consumers. Likewise, delivery service would tend to become more complex in the enlarged retail trade zone.

Advertising

Interurban development directly affects advertising operations. Maximum effective advertising is a process of communicating with the desired audience at the lowest cost. Part of the desired audience is shifting to outlying metropolitan areas, suggesting a need for a corresponding shift in advertising coverage. That such an adjustment took place in suburban development is shown by the media growth of 27.1 per cent in suburbs during the years 1950-55, while media growth in central cities of metropolitan areas was only 2.2 per cent in the same period.[12] A similar change in advertising emphasis to favor interurban growth should be expected.

From a cost standpoint, it is probable that advertising will experience lower relative costs because of the more densely populated markets. More listeners will be reached by the same radio or television signal so that, given the same total charge, per capita costs should be lower. Likewise, local printed media would have a larger group of readers over which to spread the advertising charges.

In regard to specific media, the population trend toward a regional unit would influence an additional market division between national advertising and local advertising. A former metropolitan newspaper could become a regional medium as it expanded circulation into other metropolitan areas. A trend in this direction is already perceptible as large metropolitan newspapers circulate into outlying areas. In the case of the *Atlanta Journal*, as an example, circulation extends throughout the entire state. A predated issue is printed for distribution to distant points of the state, particularly in South Georgia. Of the 413 communities which receive copies of the *Atlanta Journal*, 161 get the predated issue. The next probable step would be to circulate special zoned editions to different locations.

As the large metropolitan dailies expand to cover primarily regional interests, there arises a need for community newspapers. In an interurban development, each cluster of population can support a newspaper of its own. In the New York metropolitan area the *Newsday* newspaper, founded in 1941, has grown to a circulation of 235,000, mostly in fast-growing Long Island.[13] In and around the Atlanta metropolitan area, there are thirteen geographical community newspapers.

Magazine circulation would also be affected by interurban development. Some magazines already sell their circulations on a traditional sectional basis. Specific interurban developments would influence these magazines to parallel their sectional concept to coincide with the population regional bounds. The increased density of population in these regional developments would probably influence additional national magazines to divide their circulation on a sectional basis. At the same time, there would be a potential market for single sectional magazines to be established, concentrating upon a particular regional area only.

The primary effect of interurban development upon radio and television would be the increased audience potential. Relative costs of these media would be less. Use of television as a means of advertising would become more available to a greater number of advertisers. Television coverage would probably be effective in a broad approach to an interurban region. Few stations would be needed to provide over-all coverage in the concentrated area. Along with timely telecasts, television has the advantages of a combination of visual, audio, and motion characteristics, all of which make the medium a very effective one for advertising purposes.

The opportunity for radio is the establishment of additional local radio stations in the various communities of an interurban development. These stations would be in a peculiarly advantageous position to report locally to a specific geographic group, similar to the appeal of community newspapers. Radio's probable future role seems to be one of a public service, emphasizing news and musical programs. In news broadcasting, radio has the desirable characteristics of speed and intimacy. Also, certain products, e. g., drug items, are advertised very effectively over radio, assuring radio of a continued share in future advertising operations.

Marketing Research

Interurban development would affect three aspects of marketing research: the need for increased consumer research, the basis for sampling, and the basis for sales control. Increased consumer research

12. Gerald T. Arthur, "Are You Reaching the 'New Faces' in Your Markets?" Sales Management, LXXIX (November 15, 1957), p. 64.

13. "Marketing and Today's Suburbia," Tide, XXIX (June 18, 1955), p. 20.

would be needed because of the differences in consumer make-up in outlying areas, including personal and motivational differences. These consumer characteristics are fundamental in marketing operations. It has been estimated that not more than half of the average household income goes for subsistence expenditures, and that in the future this proportion will be even less.[14] Since the differences in the interurban consumer's make-up would influence about half of his consumption, marketing research studies of these differences would be very important to maximize efficiency of operations. Types of studies that would be beneficial include consumer product preferences, consumer shopping habits, and consumer expenditures. This information would facilitate marketing adjustment to the dynamic population environment.

A primary influence upon the need for increased marketing research in outlying interurban areas is the strong desire for change that exists there. Marketing practitioners can anticipate more frequent changes in interurban consumer preferences and expenditures, reflecting a greater need for research activity. Not only would this research be an effort to collect information about the interurban consumer but, in addition, this data would provide a basis for predicting future urban consumer attitudes. Outlying interurban consumers have a disproportionately greater influence upon marketing trends than do the city consumers. As a result, marketing research findings about the interurban market would be useful in forecasting preferences and expenditures in the central urban markets.

Increased mobility of consumers, who can travel long distances easily, increases the need for consumer research. In 1957 there were about 31 million changes of residence, and more are predicted for the future years.[15] The retailer will not have the time required to learn gradually about his potential consumer group. Instead, the rapid fluctuation of consumers requires that marketing research be carried out as the means of becoming acquainted with the consumer. Environmental changes in the past have altered consumer attitudes and shopping habits; the change toward interurban living can be expected to have a similar influence. To perform most efficiently, marketing practitioners will have to conduct increased consumer research to determine new consumer attitudes and shopping habits.

Instead of dividing the United States into geographical sections for sampling purposes, researchers could separate the country into interurban regions. This sampling base would be very meaningful for general marketing research studies. A large majority of the population and retail sales will be located in interurban areas. Mass communications, mass marketing, and mass mobility would effect the development of an interurban region into a single complete unit. National marketing surveys would be facilitated by the use of these natural regions as bases for sampling instead of arbitrary geographical boundaries.

An interurban region could also be examined as an independent universe for sampling purposes. Regional development is a concentration of many consumers in a single geographic market. For many research problems, e. g., product testing, the concept of sampling individual cities as separate markets could be applied to a regional development as a separate market. Results of one sample could be used as a basis for generalizing about the entire region. This sampling procedure would be an advancement of marketing research from study of individual cities to a study of groups of cities in one sample taken from an interurban area.

Another advancement in marketing research would be the more fertile nature of interurban areas as a basis for sampling. Potential interurban respondents have characteristics which would assure maximum data in quantity and quality. From a motivational standpoint, the typical interurban resident has a significantly greater desire for analysis than do city residents. This characteristic would be beneficial for marketing research surveys since one of the difficulties in collecting data is that the respondent hasn't analyzed his action or the action of others sufficiently to give much information in research interviews. The interurban resident, on the other hand, has a high degree of analysis and could contribute more to a survey, thereby influencing the use of interurban areas as a basis for sampling.

Development of interurban regions would present a new basis for sales control, which includes forecasting sales, computing market potentials, and analyzing sales. In each function of sales control, marketing practitioners would have a unified basis for operations with the utilization of interurban areas. In forecasting sales, use of interurban markets would be a logical division of the national market, each interurban region representing a separate economic unit. In computing market potentials, use of interurban markets would offer a sound foundation as the basis since these markets would include a majority of population and retail sales. The undertaking of establishing market potentials would be facilitated by the reduced number of divisions (interurban areas vs. metropolitan areas). In analyzing sales, use of interurban areas as sales territories would allow more accurate control in the evaluation of sales efforts. Each interurban area would represent a sales unit for purposes of analysis. Instead of studying individual metropolitan markets in a regional unit, the interurban area would be analyzed as a whole. Sales control functions would be directly benefited by the utilization of interurban regions as a basis for operations.

14. Robert Ferber, "Our Changing Consumer Market," Business Horizons, I (Spring, 1958), p. 61.
15. Willem, op. cit., p. 31.

The Southeastern Corner

by
Warren A. Walker

AREA RESOURCE DEVELOPMENT

In last month's article some of the population shifts that are taking place in the state of Georgia were reviewed, and, in a general way, some of the underlying causes were discussed. This month some additional details are presented, and a brief discussion of how these problems are currently being approached is included.

Part II
Attracting Industry for the Small Community

ATTRACTING MANUFACTURING INDUSTRY

In the five so-called "Deep South" states—Alabama, Georgia, Louisiana, Mississippi, and South Carolina—it has been estimated that approximately 1,570[1] manufacturing plants (each employing 25 people or more) were placed in operation during the period 1946-1955. In these five states there are 419 counties, of which 313 had at least one of these plants added to its economic base during this period. Like many statistics, this is a little misleading unless examined in detail. In spite of the fact that approximately three counties out of every four received at least some marginal increment to its economy, a disproportionate number (468, or about one-third) of the total number of plants located in Georgia. From these figures it may reasonably be assumed that the problems of population migration from small towns and rural areas are greater in the other states than in Georgia.

Industries Attracted to Small and Big Cities

In last month's article, mention was made of the fact that a large percentage of the new industrial plants locating in smaller cities are firms which utilize relatively unskilled or semiskilled labor and firms which employ a large percentage of female employees. (Needlework, textile plants, and lumbering would fall in this general category.)

On the surface at least, rural counties in Deep South states seem to have fared well in attracting new plants in recent years—indeed, statistics show that they got half of the total! However, this proportion (one-half) really is not true of the number of new jobs created. As a matter of fact, nearly one-third of all of the new industries were located in the 15 **metropolitan areas** in these five states; and, furthermore, this one-third represented the bulk of the high-wage rate, big-payroll, industrial-goods type of plant.

A moment's consideration will indicate that this is not only a natural distribution, but almost the only possible one. Plants that require large numbers of people go where large numbers of people are. As pointed out earlier, when a metropolitan area reaches a certain size, future growth tends to become a self-generating proposition. It is reasonable to suppose that there is some upper limit to these economies of size that accrue to metropolitan areas, but technological and sociological changes tend to make this upper limit a moving and indeterminate point.

The result of all these considerations is that the typical small community located at a considerable distance from a metropolitan area faces a difficult, but not impossible problem.

For efficient operation, certain industries, such as forestry and some types of mineral extraction, depend on proximity to sources of supply; and often these sources are located in outlying areas, away from metropolitan centers. Furthermore, these industries usually utilize a kind of labor which need not be skilled. It is reasonable to conclude, therefore, that such communities will always have a relatively high percentage of such type industry. Other kinds of activity, such as textiles and apparel, must give major consideration to the proximity of a labor supply which need not be highly skilled.

Industries which produce consumer goods other than apparel and textiles are best located in areas where there is a high density of population. As a practical matter, the metropolitan area usually provides the best combination of the other factors of production and marketing.

WHAT IS AVAILABLE FOR THE VERY SMALL COMMUNITY?

In general, there are two types of industries that can be located profitably in a small community. This is, of course, in addition to the traditional types previously mentioned.

One such type of activity is certain kinds of industrial goods industries. These include such things

1. Data on number and distribution of industries obtained from Hammer and Company Associates, Inc.

as fabricated metals, transportation equipment, and certain types of chemicals and machinery. This should not be interpreted to mean that industrial goods plants are primarily oriented to small communities. As the accompanying tabulation shows, just the opposite is true as a general proposition. It does mean that some types of industrial goods can be produced profitably in certain small communities. Each case must be considered individually. In general, those products that employ a high percentage of hand labor on the semiskilled level are best suited.[2]

Distribution of New Plants in Five State Southeastern Area,* 1946-1955

Number of New Plants:	Rural Areas	Urban Areas	Total
Textiles, furniture, etc.	536	213	749
Consumer goods	163	226	389
Industrial goods	159	272	431
Totals	858	711	1,569
Per Cent Distribution:	%	%	%
Textiles, furniture, etc.	72	28	100
Consumer good	42	58	100
Industrial goods	37	63	100

*States included are: Alabama, Georgia, Louisiana, Mississippi, and South Carolina.

Source of data: Surveys privately circulated by Hammer and Company Associates, Inc.

Several Georgia communities have benefited from industries of this type for a number of years, and other types of activity have been added recently. For example, there is a firm which manufactures school bus bodies under the trade name of *Blue Bird* and has achieved a national distribution in recent years.

Another type of industrial activity from which a small community may benefit is as a secondary plant producing for a prime manufacturer. Such types of activity may take several forms, but the net result to the community differs only in detail and not in principle. In some instances they are branch plants of the primary manufacturer; in others they are subsidiaries; in still others they are locally-owned subcontractors to the primary manufacturer.

While there has been a great deal of discussion in recent years of the fully integrated plant and of the advantages to be gained thereby, there is another side to the picture. Certain types of rough processing or subassembly operations can be more advantageously carried out near sources of raw materials, or in an area with a desirable tax structure relative to that type of operation. Another feature that has attracted increasing attention in recent years is the desirability of geographic diversification for strategic considerations in the interests of national defense.

WHAT CAN THE SMALL COMMUNITY DO?

The small community can obtain a great deal of assistance from many sources, but the initiative rests with the community itself. The typical industrial firm is more than willing to sell itself to the community and to become a "good citizen," but generally the city must sell itself first. The way in which a city sells itself is no different in principle from any other type of selling.

It has often been said that the successful salesman knows his product and believes in it; and so it must be with cities. The person who represents a city and discusses possible plant locations with company representatives usually is a responsible citizen, a property owner, and feels a certain pride in his community. This is as it should be, for defeatism breeds defeat. But there is more to the problem than this. Like any other salesman, this representative should know in minute detail what his product has to offer. This knowledge should not deal in generalities, but with specific information that will be of value to the prospective industry in reaching a decision.

Even if the city does not yet have a comprehensive city plan, it should have a fairly detailed inventory of what it has to offer: for example, information on the amount of water, electricity, gas, telephone service, and transportation facilities available, as well as the local tax structure. This information should be complete as to quantity available, quality available, and costs, and should be summarized for quick reference and orderly presentation. Detailed information should be on hand as to what land is suitable and zoned for industry. In other words, communities need to present to industry concrete facts regarding conditions which will bear on costs of production and marketing, rather than simply rather vague assertions that "this is a good place to live," "we have a favorable climate," or "we have nice people here."

THE PLACE OF AREA PLANNING

The central core of area planning necessarily begins with the communities within the area. In the past the trouble has been that it often ends there as well. City officials must realize that a commercial or industrial activity does not have to be within the city limits for the city to benefit.

For this reason, and in an attempt to correct this type of situation, the majority of professional planners now include in their reports to the city an analysis of the surrounding area. In the case of a very small city, such an analysis might be limited to the contiguous urbanized environs. In the case of a medium-sized city of perhaps 25,000 population, it will include several counties, the cities within these counties, and an account of how their economy ties in with the economy of the city under survey.

The heart blood of any city of any size is its businessmen. If they can prosper from activities anywhere within the area, then the city also must prosper. If the businessmen suffer from a lack of activity in the area outside the city itself, then the city also must suffer.

2. The Industrial Development Branch of the Georgia Institute of Technology has made several studies analyzing the suitability of specific products to specific communities.

JANUARY 1959

ATLANTA AREA ECONOMIC INDICATORS

ITEM	January 1959	December 1958	% Change	January 1958	% Change
EMPLOYMENT					
Job Insurance (Unemployment) Payments	$549,977	$502,519	+ 9.4	$684,409	−19.6
Job Insurance Claimants†	8,403	7,979	+ 5.3	10,728	−21.7
Total Non-Ag. Employment	344,450	350,400r	− 1.7	341,350r	+ 0.9
Manufacturing Employment	83,750	83,350r	+ 0.5	85,800r	− 2.4
Average Weekly Earnings, Factory Workers	$79.79	$83.82r	− 4.8	$73.88r	+ 8.0
Average Weekly Hours Factory Workers	40.5	41.7r	− 2.9	39.3r	+ 3.1
Index of Help Wanted Ads (Seasonally Adjusted, 1947-49 Avg.=100)	146.6	133.9	+ 9.5	126.3	+16.1
CONSTRUCTION					
Number of Building Permits§	645	389	+65.8	668	− 3.4
Value of Building Permits§	$7,986,461	$15,617,850	−48.9	$8,422,027	− 5.2
Employees	21,600	21,800r	− 0.9	16,650r	+29.7
FINANCIAL▲					
Bank Debits (Millions)	$1,900.3	$2,079.4r	− 8.6	$1,799.5	+ 5.6
Bank Deposits (Millions) (Last Wednesday)	$1,240.1	$1,289.3	− 3.8	$1,094.0	+13.4
OTHER					
Department Store Sales Index (Adjusted 1947-49=100)	164	162	+ 1.2	151r	+ 8.6
Retail Food Price Index 1947-49=100)	116.2	115.7	+ 0.4	116.2	+ 0.0
Number Telephones in Service	325,033	322,948	+ 0.6	308,469	+ 5.4

r—Revised *Average month **End of period ‡—Based on retail dollar amounts
§City of Atlanta only. N. A.—Not Available ▲Data from members of the Federal Reserve System only.
†New series. Covers unemployed federal employees and unemployed veterans in addition to those covered by Georgia law. Claimants include both the unemployed and those with job attachments, but working short hours.

Sources: All data on employment, unemployment, hours, and earnings: Employment Security Agency, Georgia Department of Labor; Number Help Wanted Ads: Atlanta Newspapers, Inc.; Building permits data: Office of the Building Inspector, Atlanta, Georgia; Financial data: Board of Governors, Federal Reserve System; Postal data: Atlanta Post Office; Retail Food Price Index: U. S. Department of Labor; Department Store Sales Index: Federal Reserve Bank of Atlanta and Board of Governors, Federal Reserve System; Telephones in Service: Southern Bell Telephone and Telegraph Company.

ATLANTA BUSINESS ACTIVITY

Although available data on Atlanta business activity cannot be said to indicate the beginning of a boom, it is safe to say that these figures present a fairly good picture of an economy in the early stages of recovery. The segments of the economy most severely affected by the recession are recovering rather slowly. **Manufacturing employment,** in which the recession was sharp and severe, increased by one half of one per cent in January, but was still 2.4 per cent below January of 1958, which was also a low month. The small gain, 400 workers, was the net effect of the termination of a labor dispute in plants manufacturing household furniture and smaller gains in three other industries which were partially offset by losses in stone, clay, and glass products, the "other durables" category, and a net loss of 100 in nondurable goods employment. In 1958, average monthly employment in durable goods industries averaged about 83 per cent of the 1957 average, while employment in nondurable goods industries held steady at around 97 per cent of the 1956 average in both 1957 and 1958; and **total nonagricultural employment** averaged 99.8 per cent of the 1956 average and 98.0 per cent of the 1957 average, showing a marked tendency to rise during the last half of the year.

Employment in construction increased steadily during the March through August period of 1958, and the seasonal reduction in force which is normal during the fall and winter months was not so sharp as in 1956 or 1957. In January 1959, the industry held 21,600 employees, 29.7 per cent more than in January 1958. The seasonally adjusted index of the **number of help wanted ads** continued to rise in January. Increases in this series since March of 1958 have erased almost half the losses experienced since early 1957 when the series began its precipitous fall.

Unemployment in January 1959 increased 250 workers and stood at 4.2 per cent of the civilian labor force. In January 1958 unemployment stood at 4.7 per cent of the civilian labor force, and at the bottom of the recession the percentage was as high as 5.7 per cent.

Contract completions and bad weather slowed activity in construction during January, and employment in the industry dropped 200 workers from the December total; but, as has already been pointed out, this drop is somewhat less than seasonal, and the total number employed, 21,600 (which is for the whole metropolitan area, while permit data is for this city only), is higher than in any previous January on record. **Permits valued** at $7,986,461 were issued during January, and during February the valuation rose to $20,588,611, a total for the two months of $28,475,072, representing for the most part construction which will take place during the coming months and assure employment to many people, both directly in work on the projects and indirectly in the supplying of materials for these projects. In contrast, 645 **permits were issued** in January, this being the lowest number issued in this month since 1950. The downtrend in the number of permits has been evident since 1955, but there was a weak reversal of the movement in 1958. The powerful upswing in valuation of permits is attributable to increased emphasis on heavy construction, large office buildings, hospitals, schools, factory buildings, etc.

Bank debits registered a 5.6 per cent gain in Atlanta during the month of January over the same month last year, but were 8.6 per cent below December. The gain over the last year's figure is important because it is a gauge of spending and business activity, although financial transactions are also reflected in the figures. Most other major trade centers in Georgia also show increases in bank debits this January from January 1958. Some of the increases are: Macon, 7 per cent; Savannah, 9 per cent; Columbus, one per cent; Augusta, 10 per cent; Albany 6 per cent; and Valdosta 13 per cent.

Bank deposits, down 3.8 per cent from December, were 13.4 per cent higher in January 1959 than in the same month in 1958. The drop from December was attributable to seasonal factors and was somewhat smaller than is usually expected at this time of year. It is important to note that bank deposits have grown at a very rapid rate during the past 12 months and were at an all-time high in December.

Consumer interest in after-Christmas sales pushed the seasonally adjusted **index of department store sales** for January two points higher than it had been the month before and 13 points higher than it had been in January 1958.

Georgia State College
of Business Administration
33 Gilmer St., S. E.
Atlanta 3, Georgia
RETURN POSTAGE GUARANTEED

SECOND-CLASS MAIL PRIVILEGES
AUTHORIZED AT ATLANTA, GEORGIA

New Research Paper Available

RESEARCH PAPER NUMBER 12

The Development of Georgia's Tufted Textile Industry

. . . by Ray G. Jones, Jr., and Claude A. Campbell

This latest study is a report on the dynamic growth of a Georgia industry which had a rather chance beginning. The history of tufted textiles embraces the problems commonly faced by industries emerging from local small-scale entrepreneurship. An understanding of the nature of these difficulties and a hindsight view of possible solutions to some of the problems might help forestall similar tribulations for other infant industries.

Mr. Jones, co-author of the study, writes with a particular interest as he is a native of Dalton, Georgia, the center of the tufted textile industry.

Also For Distribution

RESEARCH PAPER NUMBER 7—**Employees' Attitudes Toward Unionization, Management, and Factory Conditions: A Case Study,** by Anthony Stampolis.

RESEARCH PAPER NUMBER 11—**Marketing Implications of Interurban Development,** by Stephen Paranka.

Research Papers may be obtained by sending request to the Bureau of Business and Economic Research, School of Business Administration, Georgia State College of Business Administration, 33 Gilmer St., S.E., Atlanta 3, Georgia. Single copies are available without charge.